

Title (en)  
A METHOD FOR PRODUCTION OF METHYL METHACRYLATE BY OXIDATIVE ESTERIFICATION USING A HETEROGENEOUS CATALYST

Title (de)  
VERFAHREN ZUR HERSTELLUNG VON METHYLMETHACRYLAT DURCH OXIDATIVE VERESTERUNG UNTER VERWENDUNG EINES HETEROGENEN KATALYSATORS

Title (fr)  
PROCÉDÉ DE PRODUCTION DE MÉTHACRYLATE DE MÉTHYLE PAR ESTÉRIFICATION OXYDATIVE À L'AIDE D'UN CATALYSEUR HÉTÉROGÈNE

Publication  
**EP 3658528 A1 20200603 (EN)**

Application  
**EP 18742643 A 20180625**

Priority  
• US 201762538232 P 20170728  
• US 2018039231 W 20180625

Abstract (en)  
[origin: WO2019022886A1] A method for preparing methyl methacrylate from methacrolein and methanol. The method comprises contacting in a tubular reactor having at least four zones a mixture comprising methacrolein, methanol, oxygen and a base with a catalyst bed of heterogeneous catalyst comprising a support and a noble metal, wherein reaction zones comprising catalyst beds alternate with mixing zones not comprising catalyst beds.

IPC 8 full level  
**C07C 67/39** (2006.01); **B01J 8/22** (2006.01); **C07C 69/54** (2006.01)

CPC (source: EP KR US)  
**B01J 8/0242** (2013.01 - EP); **B01J 8/0453** (2013.01 - EP KR); **B01J 8/0492** (2013.01 - US); **B01J 8/06** (2013.01 - EP KR); **B01J 8/065** (2013.01 - US); **B01J 8/067** (2013.01 - US); **B01J 23/44** (2013.01 - EP KR US); **B01J 23/52** (2013.01 - EP KR US); **B01J 35/40** (2024.01 - US); **C07C 45/75** (2013.01 - US); **C07C 67/39** (2013.01 - EP KR); **C07C 67/44** (2013.01 - US); **C07C 69/54** (2013.01 - KR US); **B01J 21/04** (2013.01 - EP); **B01J 35/51** (2024.01 - EP); **B01J 2208/00106** (2013.01 - EP KR US); **B01J 2208/0053** (2013.01 - EP KR US); **B01J 2208/00592** (2013.01 - EP KR US)

Citation (search report)  
See references of WO 2019022886A1

Cited by  
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**WO 2019022886 A1 20190131**; BR 112020001722 A2 20200721; BR 112020001722 B1 20230314; CA 3071437 A1 20190131; CN 111433182 A 20200717; CN 111433182 B 20230404; EP 3658528 A1 20200603; EP 3658528 B1 20210818; JP 2020528351 A 20200924; JP 7097948 B2 20220708; KR 102563776 B1 20230804; KR 20200033278 A 20200327; SA 520411167 B1 20220612; SG 11202000744U A 20200227; US 10745341 B2 20200818; US 2020199059 A1 20200625

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